

**REMARKS**

This Amendment is filed in response to the Office action dated July 29, 2003. All objections and rejections are respectfully traversed. Reconsideration and further examination of the application, as amended, are respectfully requested.

The second full paragraph of page 14 of the specification was amended to correct a typographical error.

Applicants submit formal drawings to replace the informal drawings filed with the application. Applicants respectfully request that the Examiner approve the formal drawings.

**§102**

At paragraph 2 of the Office action, claims 1, 2, 12-18, and 25 were rejected under 35 U.S.C. 102 as being anticipated by U.S. Patent 6,591,331 to Khanna (hereinafter "Khanna").

**Differences Between the Present Invention and the Cited Art**

Claim 1 in relevant part recites:

A pattern matching engine for use in searching network messages... comprising:

a decoder circuit coupled to the regular expression storage device... *configured to control an input to the CAM that includes a given network message or selected portion thereof* for comparison with the regular expressions contained within the CAM...

Applicants respectfully submit that Khanna fails to disclose Applicants' claimed ***pattern matching engine comprising, a decoder circuit configured to control an input to a CAM that includes a given network message or selected portion thereof for comparison with the regular expressions contained within the CAM.***

It is not altogether clear from the Office action exactly what element of Khanna is being equated with the recited decoder. The column and line number references stated in the Office action of Khanna include descriptions of the following components: a main priority encoder (106), separate block priority encoder (110), decoder (112), Row Enable Logic (REL) circuit blocks (104) and match flag circuits (108).

In any event, none of these components, including Khanna's decoder (104) is ***configured to control an input to the CAM that includes a network message or a selected portion thereof***, as is claimed by Applicants. In contrast, Khanna's decoder generates "enable signals" to control the output of the REL circuits. The output is ultimately used to generate a sub-block address at the priority encoder. Khanna provides no disclosure that its decoder can somehow control an input to a CAM. Indeed, directing the Examiner's attention to Fig. 1 of Khanna, there is no control or other line from Khanna's decoder (element 112) back to the comparand data (element 118) that is being input into the CAMs (elements 102). Instead, Khanna's decoder (112) is only able to control the REL circuit blocks (elements 104).

Further, Khanna does not disclose ***appending a tag to a network message*** or a CAM having a plurality of entries wherein each entry ***contains a tag value*** such that all

CAM entries having the *same tag value define a single logical CAM* within the CAM as is claimed in the present invention. Moreover, Khanna fails to disclose a decoder that *constrains* the matching of a CAM input to CAM entries corresponding to a logical CAM as is also claimed in the present invention.

In addition, configuring the decoder to control the input to the CAM provides several advantages over the art of record, including Khanna. For example, by configuring the decoder to control the input to the CAM, a network message that is wider than the CAM can still be searched. Specifically, the decoder can select a first portion of the network message to be searched first, and then select the remaining portions. In this way, network messages that are larger than the CAM can be searched. Khanna provides no such provision.

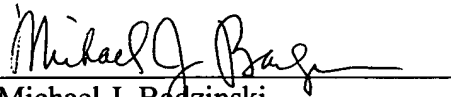
All independent claims are believed to be in condition for allowance. All dependent claims are dependent on believed to be allowable independent claims and therefore believed to be in condition for allowance.

Applicants note that claims 19-24 are allowed and claims 3-11 would be allowable if rewritten.

Early favorable action is respectfully requested.

Please charge any additional fee occasioned by this paper to our Deposit Account  
No. 03-1237.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Michael J. Badzinski", is written over a horizontal line.

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